



WEST DAVIS
CORRIDOR

Technical Memorandum 21 – No-Action Alternative Methodology

in support of the
Environmental Impact Statement

West Davis Corridor Project

Federal Highway Administration
Utah Department of Transportation



February 4, 2013

1.0 Introduction

The purpose of this technical memorandum is to document the No-Action Alternative used in the West Davis Corridor (WDC) Environmental Impact Statement (EIS) to evaluate impacts to the natural and built environment. The WDC Project is proposed in western Davis and Weber Counties, which are expected to have substantial growth in population and households through 2040 (the WDC design year). This growth is expected to occur at similar levels with either the WDC No-Action or action alternatives. The basis for this assumption is explained below.

2.0 Population and Land-Use Projections for 2040

2.1 Population Growth through 2040

The growth projections used to determine future growth and development patterns in Davis and Weber Counties for the WDC Project came from the Utah Governor's Office of Planning and Budget (GOPB). The growth projections for Davis and Weber Counties for the WDC EIS were assumed to occur with or without the project. This was based on the fact that population projections are performed independent of transportation projects.

The Utah Population Estimates Committee (UPEC) develops the official population estimates for Utah and the 29 counties in the state. Coordination and staffing of the Committee is the responsibility of the Demographic and Economic Analysis Section of the Governor's Office of Planning and Budget. Membership includes representatives from state government, universities, and other organizations with knowledge of the data used in making population estimates. UPEC develops population estimates using a combination of U.S. Census data, school enrollment, membership in the Church of Jesus Christ of Latter-day Saints (LDS), tax return data from the Internal Revenue Service (IRS), and housing units (GOPB 2010).

The GOPB projections are then used by the Wasatch Front Regional Council (WFRC) to determine the need for projects such as the WDC. In addition, the population projections inform the planning processes of state and local governments as well as private entities. Thus, the population projections drive the need for transportation projects, and the growth and related development are expected to occur with or without such projects. A corridor study was prepared for the WDC in 2001, and, based on expected future growth, the study determined that the WDC was needed.

On past projects, comments have been received about the accuracy of growth projections from GOPB. To address the accuracy of population projections, GOPB published the *State of Utah Demographic and Economic Projections; March 2008*. This report concluded that past population projections overall for Utah were within 5.0% of the actual populations.

2.2 Land-Use Projections for 2040

To determine future land uses with the No-Action and action alternatives, the WDC EIS used information from GOPB and city plans.

2.2.1 Land-Use Projections from GOPB

In order to illustrate what land use in Utah might look like in 2030 based on population projections, GOPB determined the average density per developed acre by county. Using growth projections through 2030, GOPB determined that 493,000 acres statewide would be added to the current amount of developed land. This additional 493,000 acres of development was then proportionally allocated to zones within each county based on past and future growth trends.

The changes in land use are described in the *2008 Baseline Report: Current Conditions, Trends, and Projections* (GOPB 2008). In this report, the amount of future development is provided for each county. According to GOPB, about 47,000 additional acres are expected to be developed between 2005 and 2030 in all of Davis and Weber Counties, based on a current urbanized area of about 119,000 acres and a future urbanized area of about 166,000 acres in 2030 (GOPB 2008).

Since the WDC Project design year is 2040, the WDC team used a similar pace of development through 2040. Using this assumption, about 66,000 acres would be developed between 2005 and 2040 in the two counties independent of the WDC. The assumption of the similar pace of development is based on the expected growth rate of about 1% per year in Davis County and 1.6% per year in Weber County between 2030 and 2040 compared to about 1.3% and 1.5% per year between 2010 and 2030 in Davis and Weber Counties, respectively.

See Appendix A for maps produced by GOPB showing existing Wasatch North development in 2005 and expected future growth in 2030 (GOPB 2008). The information in these maps was used to determine future development and potential cumulative impacts to resources.

2.2.2 Land-Use Projections from City Planners

Cities use population projections provided by GOPB to develop their land-use plans. Based on the population and household projections, the Cities determine future expansion areas and identify potential future roadway projects as well as other city infrastructure needs. Within the WDC study area, growth is already occurring at a rapid rate. New subdivisions are replacing agricultural land, which is the only remaining land available. This trend is demonstrated by the loss of farmland between 1974 and 2002: Weber County lost 109,200 acres of farmland, and Davis County lost 71,200 acres of farmland. This loss of agricultural land is occurring because the study area contains a good transportation network.

An important factor in determining where growth will occur in the future is transportation infrastructure. One of the main reasons development is occurring rapidly in the WDC study area is the existing transportation network. As shown in the figure titled Current (2011)

1 Transportation Network in Appendix A, the study area has an extensive network of arterial,
2 collector, and local roads. The major arterial roads such as Antelope Drive provide access to
3 I-15, which provides access to major employment centers in Salt Lake City and Ogden.
4 Based on this existing extensive road network, future population projections, and available
5 undeveloped, land city planners expect growth to continue at a similar pace, even without the
6 WDC (West Davis Corridor Team 2012).

7 On March 14, 2012, the WDC team interviewed officials from Weber County and the Cities
8 of West Haven, Hooper, Clinton, West Point, Syracuse, Layton, Kaysville, and Farmington.
9 These interviews yielded information about planned land-development projects, reasonably
10 foreseeable development patterns, the potential effect of transportation planning decisions on
11 types of development, and the degree to which future development and real estate investment
12 decisions were related to the WDC. These officials were asked how the land within their
13 respective cities would develop differently with the No-Action Alternative compared to the
14 action alternatives.

15 All of the officials except for those from West Point felt that the cities would grow at a
16 similar pace with or without the WDC. The West Point planners estimated that the total
17 development in West Point would be around 65% to 70% of build-out in 2040 with the WDC,
18 which is about 5% to 10% more with the WDC than without it. However, even with this
19 slight difference in growth in one city, the study area is still projected develop with or without
20 the WDC based on the GOPB growth and land-use projections. Furthermore, the additional
21 growth in West Point would occur mainly around the proposed WDC 1800 North interchange
22 (see Chapter 23, Indirect Effects, of the EIS).

23 **3.0 Land Availability and Price**

24 Another reason that growth is expected to occur with or without the WDC is that most of the
25 available land for future development in Davis and Weber Counties is west of I-15 in the
26 WDC study area. See the figure titled Wasatch North 2005 in Appendix A. Within the WDC
27 study area are over 20,000 acres of agricultural land that could be developed. Of this 20,000
28 acres, about 15,000 acres are within city boundaries and are shown as future urban
29 development in the Cities' land-use plans.

30 Price is also a key factor in future development. Because of the distance from urban centers,
31 the land in the WDC study area is less expensive than that in Salt Lake City or Ogden. New
32 homes are listed for under \$200,000 in parts of the study area. In 2011, the median home
33 price was between \$113,000 and \$264,000 in the study area. The lowest median price was in
34 West Haven, which is one of the least-developed cities in the northwest end of the study area,
35 and the highest median price was in Farmington, which is the most-developed city in the
36 study area and the one closest to Salt Lake City.

4.0 Conclusion

The WDC study area is projected to experience substantial future growth. The GOPB population projections (which are not based on future transportation projects) show that growth in the study area will continue between 2005 and 2040 and that this growth will occur on available agricultural land in the study area. City planners have said that the growth in their cities would occur at a similar pace with or without the WDC and that this growth can be supported by the existing transportation infrastructure. Therefore, the WDC team expects that future growth will occur at a similar rate with or without the WDC.

The following other important facts from the *2008 Baseline Report* (GOPB 2008) show that growth will occur in Utah independent of major transportation facilities:

- **Utah's population will continue to increase.** The population in Utah is projected to increase from 2.70 million people to 6.84 million people in 2060, or 1 additional person every 6 minutes.
- **Utah's population will grow at 1.9% per year through 2060.** The current and projected rates of population growth, which are approximately twice the national average, are not unprecedented in terms of Utah's recent history, nor are they unique among the Intermountain states. Utah's historical rate of population growth from 1950 to 2000 averaged 2.4% per year. The projected rate from 2000 to 2060 is 1.9% per year.
- **At the current density of development, 900 square miles of new development are needed to keep up with growth.** Given a current estimate of over 796,650 acres of developed land in the state (including commercial), the report estimated that there are an average of 3.2 people per developed acre. At that rate, 575,000 acres, or nearly 900 square miles of new land, would need to be developed to keep up with population projections for 2030.
- **The current trend will increase developed land in Utah by 75% by 2030.** This rate of development would increase the amount of land developed in the state by nearly 75%.
- **Utah will lose agricultural land to development.** Statewide, agricultural land is projected to decrease by 310 square miles by 2030.

1 **5.0 References**

2 [GOPB] Utah Governor’s Office of Planning and Budget, State and Local Planning Section

3 2008 2008 Baseline Report: Current Conditions, Trends, and Projections.

4 2010 Population Estimates for Utah Methods Documentation. April.

5 West Davis Corridor Team

6 2012 Minutes from a meeting with the West Davis Corridor Team and planning officials from the

7 Cities of West Haven, Hooper, Clinton, West Point, Syracuse, Layton, Kaysville, and

8 Farmington. March 14.

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Appendix A - Figures

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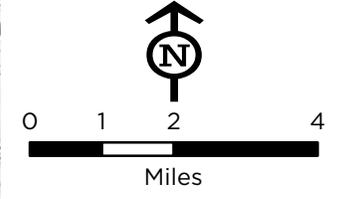
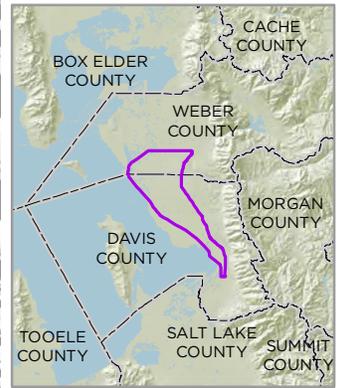
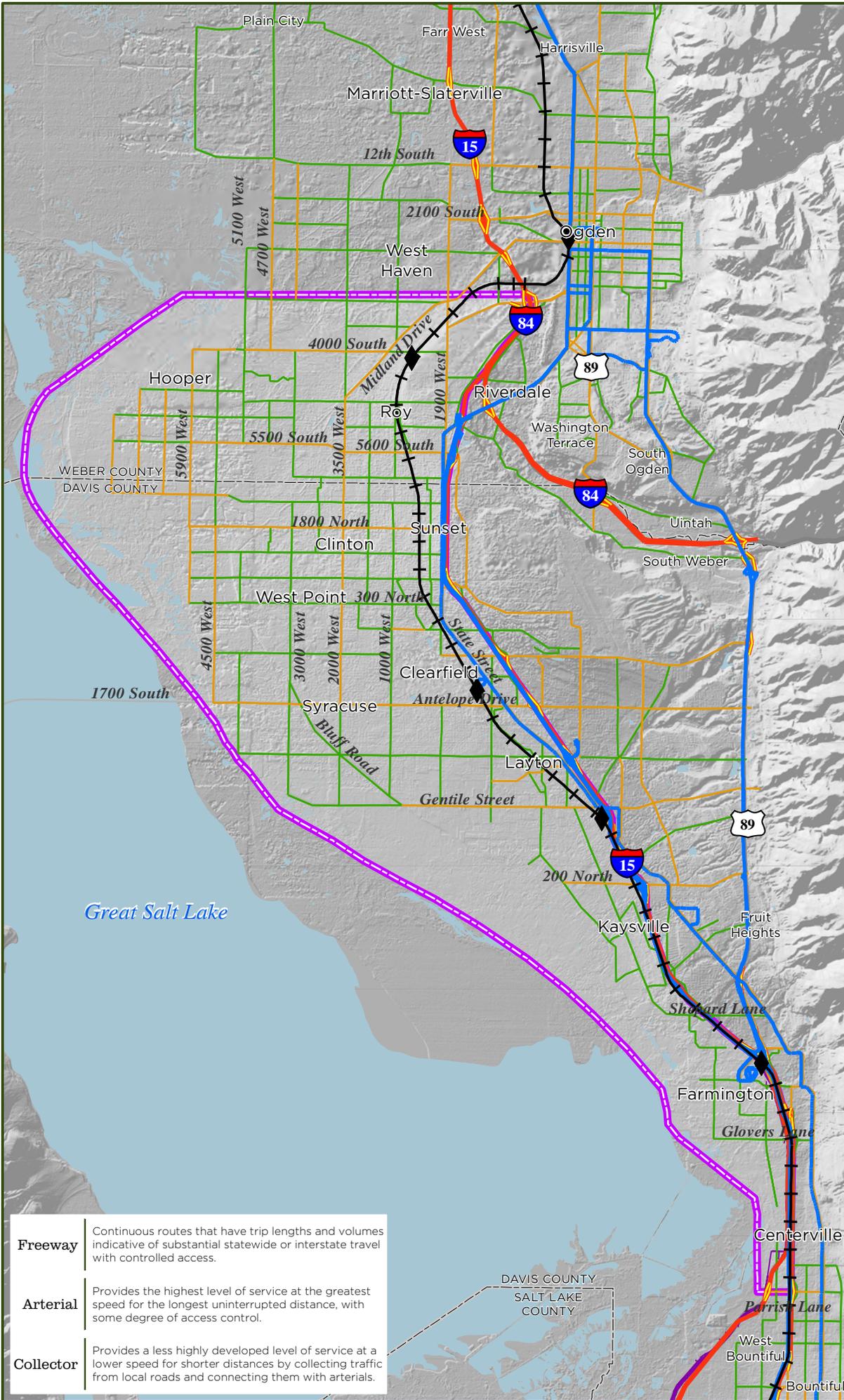


WEST DAVIS CORRIDOR

ENVIRONMENTAL IMPACT STATEMENT

Legend

- FrontRunner Stop
- FrontRunner
- Express Bus Route
- Freeway
- Ramp
- Arterial
- Collector
- Study Area Boundary
- County Boundary



Freeway	Continuous routes that have trip lengths and volumes indicative of substantial statewide or interstate travel with controlled access.
Arterial	Provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.
Collector	Provides a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.

Current (2011) Transportation Network

Figure 1-7



WEST DAVIS CORRIDOR

ENVIRONMENTAL IMPACT STATEMENT

Legend

- Alternative A1, A2, A3, A4
- Alternative A2 and A4
- Alternative A1 and A3
- Alternative B1, B2, B3, B4
- Alternative B2 and B4
- Alternative B1 and B3
- Alternative A1, A2, B1, B2
- Alternative A3, A4, B3, B4
- FrontRunner

Residential

- Exurban and Rural
- Suburban
- Urban

Commercial

- Dispersed
- Concentrated

Agriculture

County Boundary

Source: GOPB 2008



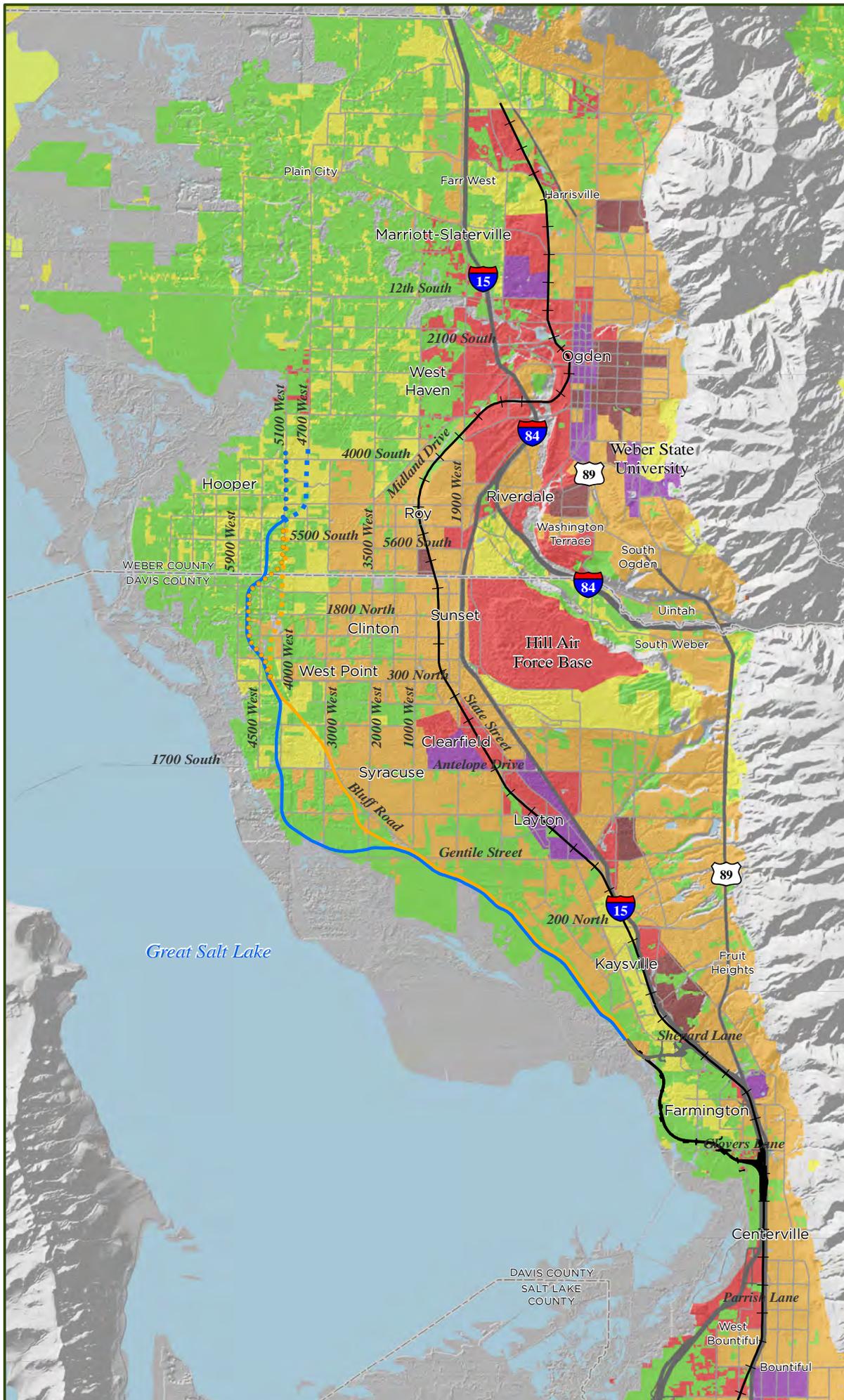
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Miles

**Wasatch Front North
Developed Land 2005**

Figure 24-1





WEST DAVIS CORRIDOR

ENVIRONMENTAL IMPACT STATEMENT

Legend

- Alternative A1, A2, A3, A4
- Alternative A2 and A4
- Alternative A1 and A3
- Alternative B1, B2, B3, B4
- Alternative B2 and B4
- Alternative B1 and B3
- Alternative A1, A2, B1, B2
- Alternative A3, A4, B3, B4
- FrontRunner

Residential

- Exurban and Rural
- Suburban
- Urban

Commercial

- Dispersed
- Concentrated

Agriculture

County Boundary

Source: GOPB 2008



0 1 2 4



Miles

Wasatch Front North Developed Land 2030

Figure 24-2

